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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,179	02/19/2004	Ekrem Oran	HIT-131J	4497
7590	05/22/2006		EXAMINER	
Iandiorio & Teska 260 Bear Hill Road Waltham, MA 02451-1018				GLENN, KIMBERLY E
			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/782,179	ORAN, EKREM
	Examiner Kimberly E. Glenn	Art Unit 2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 1-17 and 19-21 is/are allowed.  
 6) Claim(s) 18 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: ____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: ____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: ____.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

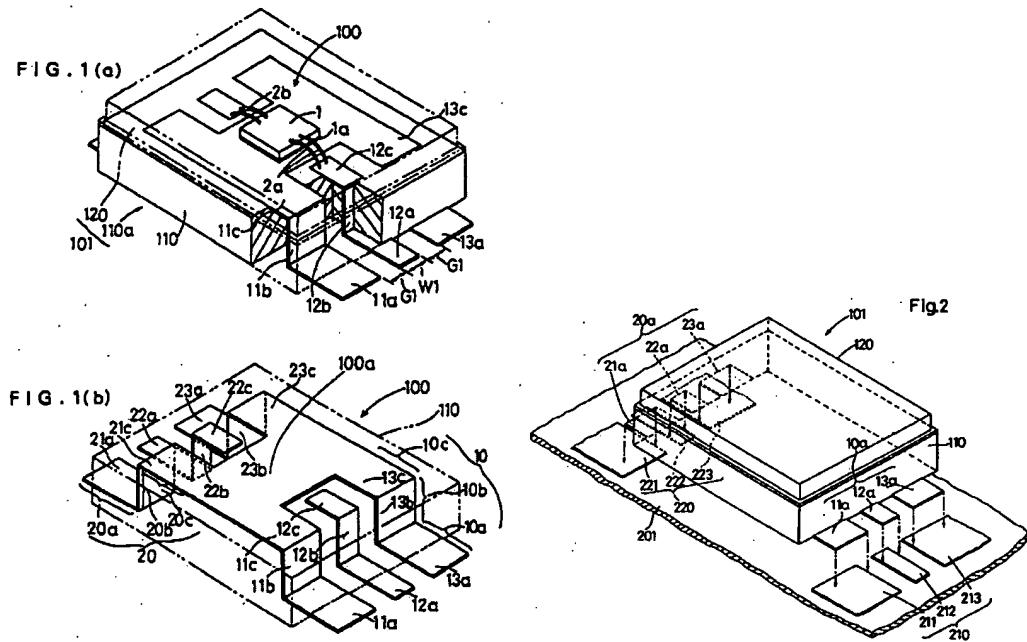
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Notani et al US Patent 5,294,897. (Of record)

Notani et al disclose a microwave package comprising: a substrate 110 including an upper surface ground plane (11c 21c 23c 13c) connected to a lower surface ground plane (11a 13a 21a 23a 211 213) by vias through the substrate; a die 1 located on the upper ground plane and including a die pad; a transmission path including: on the upper surface of the substrate, a bonding pad 12c connected to a first transmission line 12b itself connected to a transition pad 12a and, on the lower surface of the substrate, a second transmission line 212 connected to the transition pad by a via through the substrate; a wire bond (2a 2b) extending from the bonding pad 12c to the die pad 1a; and a portion of the upper surface ground plane and the lower surface ground plane connected by vias defining opposing walls on either side of the transmission path for signal isolation. The upper surface ground plane surrounds the bonding pad 12c, the first transmission line 12b, and the transition pad 12a. The lower surface ground plane (211 213) and the second transmission line (212) terminate proximate an edge of the substrate to facilitate probing. *Column 7; line 66 through column 10; line 65*



## **Allowable Subject Matter**

Claims 1-17 and 21 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: With regard to claims 1-8, 10, 16, and 17, the prior art of record does not disclose or fairly teach a low pass filter for compensating wire bond inductance, the filter including: a first capacitance formed between the bonding pad and at least the lower surface ground plane, the wire bond inductance, and a second capacitance formed between the die pad and at least the upper surface ground plane.

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Tao et al US Patent 5,389,904 and Moser US Patent 5,014,115.

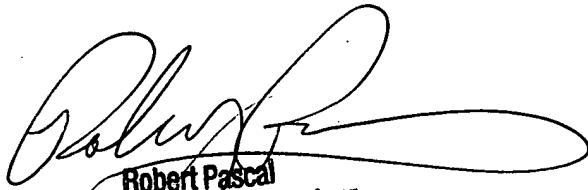
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E. Glenn whose telephone number is (571)-272-1761. The examiner can normally be reached on Monday-Friday 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimberly E Glenn  
Examiner  
Art Unit 2817

5/11/06 keg



Robert Pascal  
Supervisory Patent Examiner  
Technology Center 2800